

Chapter 8 - Emotional Functioning

Chapter 8 of *Integrating Neuropsychological and Psychological Evaluations: Assessing and Helping the Whole Child* provides an in depth discussion of emotional functioning, various assessment tools and the relationship between emotion and other neuropsychological domains.

The following story relates the testing experience of a young man with a troubled youth. Both cognitive and emotional testing results are discussed. The testing highlights the usefulness of emotional testing for informing therapeutic treatment and in acquiring accommodation in a college setting.

Michael was a twenty two year old, left handed young man who was attending classes at a local Community College. He lived at home with his mother. His father died from a heroin overdose when Michael was five.

Michael was the product of an unplanned, full term pregnancy. There were no postnatal complications and while his language was delayed, his remaining developmental milestones were within normal limits. Mother reported some sensory processing difficulties from early on. Family dynamics were very disruptive over the course of Michael's first five years, with his father and mother often arguing, his father's heavy drug use, volatility and aggressiveness and inconsistent presence due to his frequent arrests and imprisonments. While his early medical history was unremarkable, Michael was a very anxious child and, at the age of four, he developed migraines with vomiting that continued into fourth grade at which point medication improved this condition. Michael had a protracted history of anxiety, depression, suicidal ideation, self-injurious behavior and explosiveness with aggression. He had persistent social difficulties, had abused alcohol and a considerable variety of drugs, had struggled with his gender identity and had engaged in risky behaviors such as stealing and prostitution. He reported that he was currently using only alcohol, marijuana and cigarettes.

Michael's academic history was significant for behavioral difficulties beginning in day care and continuing through preschool. Fine and gross motor problems were identified in kindergarten and behavioral difficulties continued with angry outbursts as well as attentional problems. Behavioral problems continued through elementary school. He was placed on an IEP and received OT and counseling services. Academic difficulties worsened in sixth grade and his disorganization, rigidity, impulsivity, aggressiveness and anxiety became more pronounced. By seventh grade he began abusing alcohol and by eighth grade, his emotional difficulties significantly interfered with academics. By tenth grade, he was increasingly isolated, abused alcohol and drugs, smoked cigarettes and became resistant to academic support. After tenth grade, he transferred to a local, private therapeutic high school. He dropped out of there after nearly two years but completed his GED. He had been taking courses successfully at community college over the last year and a half and demonstrated an affinity for history

and science. He had begun work at a cafe and expressed an interest in attending culinary school.

Michael had been in and out of numerous day and residential treatment programs. At the age of twenty, he developed a severe agoraphobia that lasted for ten months. He had been in treatment since kindergarten with the same psychiatrist. Michael had a protracted history of psychopharmacological interventions prescribed by his doctor, including Risperdal, Abilify and Adderall. He was referred for testing by his psychiatrist and, at the time of testing, was taking only Ativan for anxiety.

Michael presented as slightly disheveled and casually dressed in a Celtics hat, Stooges (punk band) T-shirt, jeans and sneakers. He greeted me with fleeting eye contact while eating an apple and texting on his phone. He had difficulty modulating the volume of his speech and it lacked prosody. He made it clear that he was not happy to be participating in the evaluation, at one point, initiating a rant about work, school, and attending therapy as reasons that he was overwhelmed and as justification for his beginning to smoke again. At first, he declined to engage in any reciprocal conversation, lamenting that he did not need testing once again, complaining that he had been tested too many times and deciding that we should “just get on with it.”

Despite his dissatisfaction, however, he readily engaged the materials and began the process in a cooperative manner. Over the course of the evaluation, he was very emotionally labile, alternating between a more related and calmer demeanor and a very agitated and explosive reactivity. The latter pertained when he became frustrated by difficult material that impinged on a vulnerability or when he was bored by more repetitive tasks. At those points, he would exclaim “I can’t deal with this shit” and announce that he needed a break, leaving to go outside and smoke a cigarette. At other times, he would launch into a rant about previous testing experiences as well as his experience in school. He noted that he didn’t want to be labelled as having “special needs” or to be considered as “different.” After several of these incidents, however, he apologized, saying “It’s not you. You look like a nice guy. I just hate this.” He was able to accept my explanation that the information from this testing could be helpful in supporting his success in college and that, these days, many individuals in college were making good use of accommodations.

Michael became increasingly calm over the course of the first day and was eventually able to joke about certain subjects, at one point comparing himself to a character in a story read to him, noting that, like the character, he didn’t like to “get up early,” was “hungry” and was often “fucking up.” By the end of the first day, he was much more agreeable and friendly, a shift in mood that was evident when he arrived for the second day of testing. For the most part, on the second day, he was much more pleasant, less frustrated and very cooperative. He appeared to enjoy the tests of emotional functioning and had no difficulty offering information about himself during the clinical interview. He only became frustrated again while completing a reading task, objecting to the test’s use of “Thesaurus words” and was better able to use his relationship with myself to regulate his agitation and reactivity.

Michael had some relative difficulty modulating his level of activity, demonstrating some motor overflow in the form of knuckle cracking, tapping his fingers, playing with the skin and hair on his arms and frequently vocalizing. He evidenced an upper trunk hypotonia as he sat at the table. He used an immature four point, left handed grip on paper and pencil tasks and stabilized the paper with his right hand. He employed useful strategies to manage tasks, talking himself through tests to support his performance, subvocalizing information that he needed to retain or tapping with his fingers to retain the number of bits of information in a sequence.

Despite the above caveats, Michael was, for the most part, very cooperative, motivated and appeared to make his best effort on all but one of the tasks given to him. Consequently, the results were felt to accurately reflect his cognitive and emotional functioning at that time.

On the WAIS-IV, Michael's verbal abilities fell in the Very Superior range (VCI = 138; 99th percentile) while his perceptual organizational abilities fell in the Average range (PRI = 96; 39th percentile). His working memory was also in the Average range (WMI = 95; 37th percentile) while his processing speed was in the Low Average range (PSI = 84; 14th percentile). While Michael's language skills were superior, he had significant relative difficulty organizing visuospatial information and integrating part to whole relationships. He also had a significant vulnerability with graphomotor skills, executive functions, and visual memory. He scored in the average range on all tests of achievement and he identified anxiety, anger control and hyperactivity as at risk on the BASC2.

In respect to emotional functioning, Michael presented as a very bright and articulate young man who was struggling to manage his mood and reactivity. His protracted history of academic, behavioral, social and emotional difficulties, as well as his early experiences within his family, appeared to have combined to present as a form of a post traumatic stress. Although he was working very hard to manage his response to challenging situations, there appeared to be a number of situations or cues that could trigger a strong emotional reaction that could undermine his resolve and negatively impact his relationships. Throughout his adolescence, he sought to identify with peers who were engaged in self-destructive behaviors, perhaps as a way to identify and maintain a connection with his father. He now appeared to be making a considerable effort to distance himself from the most destructive impulses he associated with his father's life trajectory. However, he had not yet fully emerged from that particular way of life. This was likely due to his lack of psychological resources, his underlying neurologically based difficulties with processing, his limited social skills and his tendency to use fantasy to escape the very painful reality that had been his life.

On tests of emotional functioning, results indicated that Michael had few psychological resources that he could draw upon to manage his emotional experience. As a result, he was attempting to constrict his affect through force of will. For example, on the Sentence Completion test, to the sentence stem The worst thing I ever did... he

responded "There's a lot of those. I did a lot of stupid shit. I lied, I stole, I had fights. I did everything I could to be trouble making, rebellious shit. I have no regrets. I'm not that way anymore. I try to avoid trouble." He also noted that "I'm pretty chill. I'm trying to be less angry but little things can set me off." Because he lacked the emotional and social skills to manage the complexities of the world, and certainly because of his history, Michael had gone from a self destructive attempt to be like his father and had transitioned into more of a restricted experience in which he tried "to avoid trouble." This wish to withdraw may have been one of the contributing factors to the development of his agoraphobia and may have served as a sort of transition into his current state. Nevertheless, these emotional issues continued to resonate and, because of his approach to managing his affective experience, he continued to be vulnerable to episodes of explosive emotional acting out, particularly if he was triggered by an event that resonated with his past. In such instances, he would get in touch with deeply painful internalized feelings of loss, abandonment and negativity about himself. For example, he described his parents as fighting and that they "ignored me. They had arguments and would not pay attention to me. It upset me." These feelings could then lower his tolerance for frustration, increase his impulsivity and result in a loss of control and deepen his sense of sadness and depression. It appeared to be a recent development, however, that he was able to reflect on his behavior and apologize for his actions.

Testing also indicated that Michael was feeling extremely fragile and vulnerable. Although he could put on the front of a streetwise tough who wouldn't put up with "shit" and who attempted to project an image of self sufficiency and competence, he was rife with fears and worry about his body and ability to manage. He also attempted to minimize the impact his early experience with his parent's difficulties had on him. For example, his response to the sentence stem Most families I know... was "are as fucked up as mine. No more no less. We're not special because my dad stabbed a guy in J.P. and died of a heroin overdose. No wah wah. My dad never hit me... he was just a negligent criminal junky. I was hit some but I probably deserved it. I acted like a little shit". And yet, on the other hand, he could then acknowledge his vulnerability. For example, to the stem My fears sometimes force me to... he replied "act foolishly". And to the stem My greatest weakness is... he responded "my nervousness". He also described what those fears were. To the stem I know it's silly, but I am afraid of... he wrote "Being in rooms with a low ceiling, also getting stuck on a subway." He went on to explain that he had a "fear of being in a place... like locked in a box." This fear of being confined in a box also appeared to resonate on some level with his response to the stem My most vivid childhood memory... when he wrote "my dad's funeral" and then, unlike all the other questions to which he easily responded, he said "I don't want to talk about it." Thus, Michael was clearly attempting to believe that he was quite capable of managing but continued to be fraught with very basic fears. Evidence further suggested that he also attempted to cope with his very significant distress by escaping into fantasy. While he had the ability to recognize what was right and wrong, there continued to be times when his reality testing and judgement could be compromised because of his tendency to withdraw into his imagination and not deal directly with a reality that he found overwhelming and confusing.

Because of his underlying neurologically based vulnerabilities, including a Nonverbal Learning Disability that made it difficult for him to accurately perceive nonverbal social cues and which therefore made it difficult for him to read the actions and intentions of others, Michael had significant social problems throughout his life. As he described it, he had a lot of “social interaction issues.” At that point, he appeared to have a network of friends with whom he liked to get drunk and high. As he described it, “I used to black out. I don’t do it as often. I’m more cautious now and know my limits and don’t act like a shit-head. It’s a control issue and self defense thing. I like being a happy and fun drunk. I like smoking weed. It’s a completely different experience. It doesn’t rile up emotions. It calms me. I don’t do other retarded stuff.” Michael’s use of substances appeared to be a means of self medicating his social anxiety. Fortunately, he was beginning to see some of his excess as being self destructive and as impairing his social abilities. However, he continued to express considerable ambivalence about relationships, particularly those with women. For example, at one point he described how he “puts girls on a pedestal... I would never strike a woman or pick on someone weaker. I saw that stuff when I was a kid. The idea is sickening... It was not my dad. He never hit my mom... I saw my neighbors.” However, he also indicated that What I least like about women... “Their dishonesty. They tell you what you want to hear. They’re phony and backhanded... soul murderers.” Nevertheless, he appeared to be coming to terms in his relationship with his mother and women, noting “Now mom and I are getting along better... I’m concerned when I get in an argument with her. I hold back my anger. I’d never do something like that. You’ve got to keep it in check around girls.” Thus, despite his early history and adolescent turmoil, Michael appeared to be making a considerable effort to overcome his past and work towards a future that was less disturbed. He would continue to require considerable support to do so but was beginning to develop self awareness and work toward a plan that would provide him with a more organized and independent life. The evaluation provided him with accommodations in school that he could use to support his efforts as well as information that informed his therapist of the ongoing impact of the trauma he experienced as a child and provided material which they could address in their work together.

Executive Functions

This brief vignette describes the impact difficulties with executive functions might have on a student’s ability to engage with academic material. It also highlights the relationship between executive functions, emotional regulation and the development of a sense of self as a student.

While exceptionally bright, eight year old Stefan struggled during every math and reading lesson. He had excellent verbal and perceptual skills and a rapid processing speed, but impulsivity, distractibility, and working memory issues impeded his success. He could become rude, oppositional and unsafe. Lessons were highly structured, yet flexible, individualized and took place in a quiet corner of the classroom. When math work was placed in front of Stefan, he would frequently balk, unless it involved money concepts. He was curious about money. During a lesson in which he was highly engaged and motivated, guessing accurate prices for items in a yard sale, he became

frustrated while trying to add the cost of two items, a self-generated goal. He twisted his fingers through his hair, crying out, "I can't do it! Why do you make me do this!" Stefan threw the pencil to the floor. The teacher sat beside him, instructed him to stop throwing things and asked him to take deep breaths, modeling the behavior. He scowled and shouted, but eventually started breathing along with her. "It's hard to do when you're upset, Stefan. Calm down and we will try again." Once he was calm, the teacher wrote the numbers of the yard sale items on a piece of grid paper, and asked him to try again. Scowling, he snatched the pencil, and successfully completed the addition. On this occasion, during a highly motivating activity, Stefan was able to accept the teacher's help.

Sensory Motor Integration

The following vignette highlights how the use of movement and sensory feedback impacts a group of children participating in group therapy in a classroom setting.

The classroom was a hub of noise as 9 and 10 year old children circulated around the room playing with games, stuffed animals or race cars. The teacher instructed the children to clean up their games, which was greeted with typical moans of complaint. They were transitioning into a group therapy session with the purpose of developing emotional awareness. Toys disappeared and the teachers and children sat on the floor in a circle. During the initial check in, the students were quiet and sullen, unwilling or unable to clearly state their emotional status. The teacher turned on a throbbing popular radio song and asked the children to start dancing, and match the pace of the song. They started moving, some stomping and swinging their arms. When the music stopped, the teacher put out cards depicting feelings faces and words, asking them to indicate the emotional tone of the music. They were able to indicate mad, frustrated or exciting. She then turned on a piece of classical music, slow and somber, asking them to match their movements to the rhythm. They all moved slowly, some ballet like. Again, when the music stopped, she asked them to indicate what feelings the song embodied. They indicated sad or calm. Finally, the teacher played a big band song and watched as the children joined hands, and began laughing, in a mock swing dance. Afterwards, they indicated the emotional mood as happy and fun. As the group ended, she again asked how they were feeling during the day, offering time to draw the feeling if they wanted. Each child was able to indicate various feelings from various moments of the day.